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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,379	07/14/2006	Toshifumi Kawamura	4700.P0333US	2947

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EXAMINER	
KLEMANSKI, HELENE G	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/586,379	KAWAMURA ET AL.	
	Examiner	Art Unit	
	Helene Klemanski	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) *8-10* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/14/06,10/16/06,3/20/08,8/13/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-7, drawn to an electroless plating pretreatment composition.

Group II, claim(s) 8-9, drawn to an electroless plating method.

Group III, claim(s) 10, drawn to a coated product.

2. The inventions listed as Groups I, III and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Groups I, II and III all have the same special technical feature of providing a pretreating agent comprising a noble metal soap of a fatty acid having 5 to 25 carbon atoms. However, EP 092 601 provides a pretreating agent (undercoat composition) for an electroless plating process (page 3, lines 5-20, page 9, lines 5-10 and page 10, lines 15-25), where the pretreating agent can comprise a noble metal soap of a fatty acid having 5 to 25 carbon atoms (page 3, lines 1-15, page 4, lines 15-25; note palladium laurate, palladium stearate, palladium oleate, and palladium linoleate, for example, and page 17, lines 13-20). Due to the above reference indicating that the common special technical feature of Groups I, II and III is not the applicant's contribution, the three groups lack unity of invention.

3. During a telephone conversation with T. Chapman on July 27, 2009 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-7. Affirmation of this election must be made by applicant in replying to this Office action. Claims 8-10 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result**

in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Priority

6. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on January 29, 2004. It is noted, however, that applicant has not filed a certified copy of the JP 2004/021128 application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

7. The references cited in the Search Reports dated March 1, 2005, July 21, 2007 and December 13, 2007 have been considered.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 10/482,092 (US 2005/0147755). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said copending claims and would be obvious thereby.

It is the examiner's position that: (1) the noble metal soap of a fatty acid having 5 to 25 carbon atoms of the instant claims is encompassed by the phrase "noble metal compound" of claim 5 of the above copending application and (2) the silane coupling agent having a functional group with metal capturing ability in the molecule of the instant claims is encompassed by the phrase "an organic acid salt of a silane coupling agent containing an azole in a molecule" of claim 5 of the above copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 1-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 9 and 10 of U.S. Patent No. 7,045,461. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

It is the examiner's position that the noble metal soap of a fatty acid having 5 to 25 carbon atoms of the instant claims is encompassed by the phrase "a palladium compound" of claim 9 of the above reference.

11. Claims 1-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 9-12 and 14 of U.S. Patent No. 6,780,467. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

It is the examiner's position that the noble metal soap of a fatty acid having 5 to 25 carbon atoms of the instant claims is encompassed by the phrase "a palladium compound" of claim 12 of the above reference.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/49898 (US 7,045,461 is English equivalent) in view of Yamamoto et al. (US 6,440,576).

WO 01/49898 teaches a pretreatment agent composition for electroless plating comprising mixing in advance a noble metal compound such as palladium chloride with a silane-coupling agent whose functional groups are capable of capturing metals. The silane-coupling is obtained by reacting an azole-based compound such as an imidazole with an epoxysilane-based compound. WO 01/49898 further teaches a metal plating method comprising preparing the above pretreatment agent by mixing the noble metal compound with the silane-coupling agent; treating a surface of an object to be plated such as a polyimide surface by immersing the object into the pretreatment agent; and then electroless plating the object. It is the examiner's position that the above pretreatment agent composition would be an ink composition per se. See col. 2, lines 63-67, col. 3, lines 3-8, lines 19-22 and lines 30-43, col. 3, line 50 – col. 4, line 15, col. 4, lines 27-43, col. 5, lines 5-11, examples 1-8 and claims 1 and 7-10 of US 7,045,461. WO 01/49898 fails to teach the use of a noble metal soap of a fatty acid having 5 to 25 carbon atoms as the noble metal compound.

Yamamoto et al. teach a method for plating a polyimide film comprising contacting the polyimide film with a pretreating agent comprising a palladium compound

such as palladium chloride or carboxylic acid salts of palladium wherein the carboxylic acid contains 6 to 30 carbon atoms and then electroless plating the polyimide film. See col. 2, lines 23-26 and lines 45-47, col. 4, lines 25-35, col. 5, lines 1-15, examples 1, 2 and 4 and claims 1 and 6-8.

Therefore, it would have been obvious to one having ordinary skill in the art to have replaced the palladium chloride of WO 01/49898 with the carboxylic acid salts of palladium wherein the carboxylic acid contains 6 to 30 carbon atoms of Yamamoto et al. because the substitution of art recognized equivalents as shown by Yamamoto et al. would have been within the level of ordinary skill in the art.

15. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/081652 (US 6,780,467) in view of Yamamoto et al. (US 6,440,576).

WO 01/081652 teaches a pretreatment agent composition for electroless plating comprising mixing a precious metal compound such as palladium chloride with a silane-coupling agent whose functional groups are capable of capturing metals. The silane-coupling is obtained by reacting an azole-based compound such as an imidazole with an epoxysilane-based compound. WO 01/081652 further teaches a metal plating method comprising preparing the above pretreatment agent by mixing the noble metal compound with the silane-coupling agent; treating a surface of an object to be plated such as a polyimide surface by immersing the object into the pretreatment agent; and then electroless plating the object. It is the examiner's position that the above pretreatment agent composition would be an ink composition per se. See col. 2, lines 15-67, col. 3, lines 4-51, col. 4, lines 4-23, examples 1-4 and claims 1-5, 9-12 and 14 of

US 6,780,467. WO 01/081652 fails to teach the use of a noble metal soap of a fatty acid having 5 to 25 carbon atoms as the noble metal compound.

Yamamoto et al. teach a method for plating a polyimide film comprising contacting the polyimide film with a pretreating agent comprising a palladium compound such as palladium chloride or carboxylic acid salts of palladium wherein the carboxylic acid contains 6 to 30 carbon atoms and then electroless plating the polyimide film. See col. 2, lines 23-26 and lines 45-47, col. 4, lines 25-35, col. 5, lines 1-15, examples 1, 2 and 4 and claims 1 and 6-8.

Therefore, it would have been obvious to one having ordinary skill in the art to have replaced the palladium chloride of WO 01/081652 with the carboxylic acid salts of palladium wherein the carboxylic acid contains 6 to 30 carbon atoms of Yamamoto et al. because the substitution of art recognized equivalents as shown by Yamamoto et al. would have been within the level of ordinary skill in the art.

Conclusion

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Helene Klemanski/
Primary Examiner, Art Unit 1793